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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

MACARTHUR, VICTOR L

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,345

Applicant(s)

LEY, DUANE

Examiner

Victor MacArthur

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10/14/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, drawn to a mortise and tenon, classified in class 403, subclass 361.
- II. Claims 9-15, drawn to a method of making a mortise and tenon, classified in class 144, subclass 329.

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the process of making a mortise and tenon, as described in claims 9-15, could result in a product other than the mortise and tenon disclosed in claims 1-8. For instance, a mortise and tenon, which does not comprise a first channel and second channel.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation with Michael Neustel on 4/6/04 a provisional election was made without traverse to prosecute the invention of Group II, claims 9-15. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-8 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

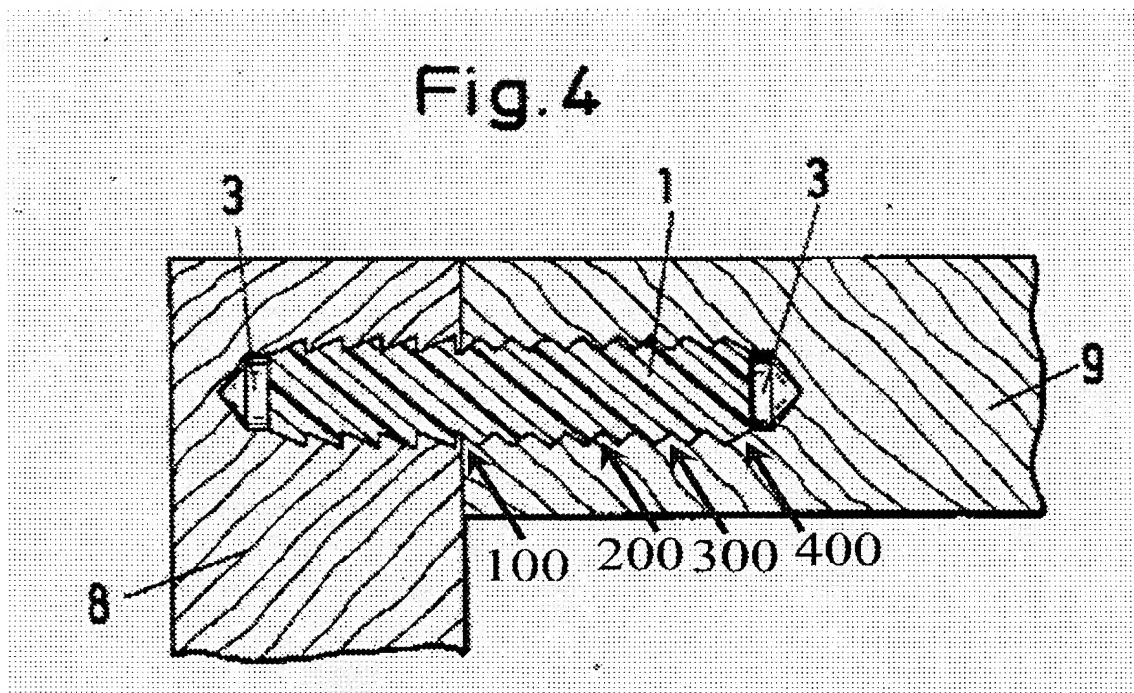
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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams U.S. Patent 4787432 in view of Astl U.S. Patent 5131783 (see marked-up figure below).



Claim 9. Williams discloses (fig.6) a method of assembling a mortise and tenon joint, the method comprising the steps of: providing a first board member (16) comprised of wood having a first end (top end of 16) and a tenon (projections at top of 16) continuously extending from the first end, wherein the tenon has an oblong cross sectional shape with opposing rounded end portions (rounded sides of projections), and a plurality of flat outer wall portions (flat sides of

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projections) within the tenon; providing a second board member (workpiece containing mortise as described in col.1, ll.25-35) having a second end (end of workpiece containing mortise, col.1, ll.25-35) and a mortise (col.1, ll.25-35) within the second end, wherein the mortise has an oblong cross sectional shape (col.8, ll.35-37 states that mortise conforms to tenon shown in fig.6) with opposing rounded end portions corresponding to the tenon, wherein the mortise has a cross sectional size larger than the tenon (so as to receive the tenon); and positioning the tenon within the mortise until the first end of the first board member is adjacent the second end of the second board member. Williams discloses that the tenon may have a corrugated shape (col.1, ll.32-36). Williams does not describe the corrugated shape as comprising a plurality of channels. Astl teaches (fig.4) a tenon that has a corrugated shape comprising a plurality of channels (100, 200, 300, 400). Astl states (col.4, ll.55-66) that the channels are beneficial for facilitating the gluing of the joint by receiving excess adhesive. Adhesive increases the strength of the joint. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the tenon of Williams to include a plurality of channels, as taught by Astl, for the purpose of receiving glue and increasing the strength of the joint.

Claim 10. Astl teaches that that the plurality of channels are comprised of: a base channel (100) adjacent a first end (end of 8 adjacent to 100); an end channel (400) within a distal end of a tenon (1); and at least one middle channel (200, 300) positioned between the base channel and the end channel, wherein the at least one middle channel is located a distance greater from the base channel than from the end channel.

Claim 11. Astl teaches that that the plurality of channels are parallel to one another.

Claim 12. Astl teaches that each of the plurality of channels extend within an outer perimeter of the tenon.

Claim 13. Astl teaches that the at least one middle channel is comprised of a first channel (200) and a second channel (300).

Claim 14. Astl teaches that a distance between the first channel and the base channel is greater than a distance between the second channel and the end channel.


Claim 15. Astl teaches that the base channel is comprised of a tapered structure (portion of 1 forming 100).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.


VLM
April 7, 2004


Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3600